

REMARKS

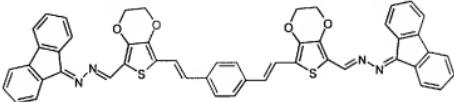
Claims 1, 4-14, 17-19, 28 and 31-33 are pending; and claims 1, 4, 5, 7-14, 17, 18, 28 and 31 and 32 stand rejected. Claims 6, 19, and 33 are objected to. Acknowledgment of the amendments to claims 1, 11, and 23 in the response filed May 29, 2007, is noted. However, pursuant to the Listing of the Claims in the response filed May 29, 2007, it is understood that the Examiner was referring to claim 28 not claim 23. Claims 20-27 had been previously cancelled.

Double Patenting

The Examiner has provisionally rejected claims 1, 4, 5, 8, 9, 11-14, 17, 18, 28, 31, and 32 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22 and 35-42 of copending Application No. 10/900,785 ("Application '785", now U.S. Patent No. 7,261,987), as evidenced by that portion of the disclosure in Application '785 that supports the subject matter rejected in the claims of Application '785. The Examiner further asserted that although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed subject matter recited in Application '785 renders obvious the subject matter recited in the instant claims.

Further, the Examiner asserted that the charge transport compound recited in reference claims 8, 19, and 42, is represented by the formula recited in reference claims 1, 12, and 35, respectively, where the group R<sub>1</sub> is represented by either of the two formulas recited in reference claims 7, 18, and 41, and the Z groups in those two formulas can be the azine-containing-9-fluorenylidene group (i.e., the third formula) recited in reference claims 8, 19, and 42. Reference claims 5, 16, and 27, which depend from reference claims 1, 12, and 35, respectively, require that the group Y in the charge transport compound formula recited in instant claims 1, 12, and 25, be a fluorenylidencyl group and R<sub>3</sub> be a bond between Y and the carbon atom adjacent to Y. Further, the Examiner asserted that the claims of Application '785 do not explicitly recite any examples of the charge transport material, but that portion of Application '785 that supports the

charge transport material of the formula recited in the reference claims discloses that such a charge transport material can be represented by the formula (3) at page 24 of Application '785;



The Examiner further asserted that the compound represented by formula (3) comprises a



1,4-phenylenedimethylidyne group, which is one member of the "X" Markush group recited in instant claims 1, 11, and 28. The Examiner asserted that the charge transport material meets the charge transport formula recited in reference claims 1, 4, 5, 11, 17, 18, 28, 31, and 32, and that Application '785 compound (3) meets the charge transport material formula recited in the instant claims. Further, the Examiner asserted that it would have been obvious for a person having ordinary skill in the art, in view of the subject matter recited in the claims of Application '785 and the disclosure of Application '785, to make and use a charge transport material that is within the compositional limitations of the formula recited in the instant claims and to use the resultant compound as a charge transport material in the organophotoreceptor and in the imaging apparatus recited in the claims of Application '785.

The rejection of claims 1, 4, 5, 8, 9, 11-14, 17, 18, 28, 31, and 32 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22 and 35-42 of copending Application No. 10/900,785 (now U.S. Patent No. 7,261,987), is respectfully traversed.

The charge transport material recited in instant independent claims 1, 11, and 28 is patentably distinct as compared to the charge transport material disclosed in Application '785. The Examiner asserted that Application '785 compound (3) comprises a 1,4-phenylenedimethylidyne group, and meets the charge transport material formula recited in the instant claims. However, the 1,4-phenylenedimethylidyne group in the charge transport

material of compound (3) is bonded on either side of the 1,4 – phenylenedimethylidyne group to a bicyclic heterocyclic ring. The formula of independent claims 1, 11, and 28,



requires that if X is a 1,4 – phenylenedimethylidyne group, the 1,4 – phenylenedimethylidyne group is bonded on either side of the group to a nitrogen atom. Further, the specification of the instant application notes that, although substitution is liberally allowed on the chemical groups, the X group of the formula of claims 1, 11, and 28 has at least 2  $sp^2$  hybridized carbon atoms that bond to the adjacent nitrogen atoms to complete the azine groups. (Page 21, lines 24-27, page 10, lines 9-11). Azine groups have the general structure  $RCH=N-N=CHR$  or  $RR'C=N-N=CRR'$  (see enclosed paper).

Application '785 compound (3), although containing a 1,4 – phenylenedimethylidyne group, does not have a 1,4 – phenylenedimethylidyne that is bonded to adjacent nitrogen atoms to complete azine groups. Hence, Application '785 compound (3) does not meet the charge transport material formula recited in independent claims 1, 11, and 28 and the claims that depend from claims 1, 11, and 28. Therefore, the charge transport materials are patentably distinct. Reconsideration and withdrawal of the rejection of claims 1, 4, 5, 8, 9, 11-14, 17, 18, 28, 31, and 32 under the judicially created doctrine of obviousness-type double patenting with respect to claims 1-22 and 35-42 of Application '785 are respectfully requested.

The Examiner provisionally rejected claims 7 and 10 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22 and 35-42 of Application '785, as evidenced by that portion of the disclosure in Application '785 that supports the subject matter recited in the claims of Application '785, in view of Diamond, Handbook of Imaging Material, pp. 395-396. The Examiner asserted that the subject matter recited in the claims of Application '785, as evidenced by that portion of the disclosure in Application '785

that supports the subject matter recited in the claims of Application '785, renders obvious the organophotoreceptor as described in paragraph 5 of the Office Action.

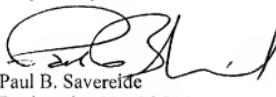
The rejection of claims 7 and 10 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22 and 35-42 of copending Application '785 is respectfully traversed.

Claims 7 and 10 depend from independent claim 1. As noted above, the charge transport material formula recited in independent claims 1, 11, and 28 is patentably distinct as compared to the charge transport materials disclosed in Application '785, and in particular, compound (3) of Application '785. The Diamond, Handbook of Imaging Material (pp. 395-396) reference does not compensate for the deficiencies of Application '785. Therefore, claims 7 and 10 are also not obvious in view of Application '785 and Diamond, Handbook of Imaging Material (pp. 395-396). Reconsideration and withdrawal of the rejection of claims 7 and 10 are respectfully requested.

Conclusion

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested. The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,



Paul B. Saveriende  
Registration No. 36,914

Customer No. 24113  
Patterson, Thuente, Skaar & Christensen, P.A.  
4800 IDS Center  
80 South 8th Street  
Minneapolis, Minnesota 55402-2100  
Telephone: (612) 252-1550

